

## REMARKS

### I. Status of the Application

Claims 1-26 are pending in this application. In the May 3, 2005 office action, the Examiner:

- A. Rejected claims 1-5, 8-15, 17 under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent Application No. 2004/0253809 to Yao et al. (hereinafter “Yao”);
- B. Rejected claims 6-7 under 35 U.S.C. § 103(a) as allegedly being obvious over Yao; and
- C. Objected to claims 16 and 18-25 as being dependent upon a rejected base claim, but the claims would be allowable if re-written in independent form including all of the limitations of the base claim and any intervening claims.

In this response, Applicants have introduced a new independent claim 26 based on the original claims 15, 18, and 19. Additionally, Applicants have amended claim 1 to include the limitations of the original claims 8 and 12 and cancelled claims 8 and 12 without prejudice. Accordingly, Applicants amended claim 9 to depend on claim 7 instead of claim 8. Furthermore, Applicants have amended claim 18 to fix a typographical error. In view of these amendments, applicants traverse the Examiner’s rejections of claims 1-7, 9-11, 13-15, and 17 and respectfully request reconsideration in light of the following remarks.

### II. Should Withdraw Prior Art Rejections That Allege Anticipated and Obvious Features

In the May 3, 2005 office action, the Examiner rejected claims 1-5, 8-15, 17 under 35 U.S.C. § 102(e) as allegedly being anticipated by Yao. For the reasons discussed below, Yao

does not teach, show or suggest all the limitations of claims 1-5, 8-15, or 17

A. Claim 1

Claim stands rejected as anticipated by Yao. Claim 1 has been amended to essentially incorporate the limitations of claims 8 and 12. Both claims 8 and 12 stand rejected as allegedly being anticipated by Yao. As will be discussed below in detail, Yao does not teach the limitations of claims 8 and 12 as originally filed and therefore does not anticipate claim 1 as amended.

In particular, the Examiner alleges that Figs. 1A-1B together with paragraphs 20, 25 and 27-29 of Yao disclose the features as defined in claim 1. However, Yao fails to teach producing a first conductive layer comprised of tungsten on a structured surface, *and* producing a second conductive seed layer comprised of a multiple-layer structure.

Regarding the first conductive layer, Yao fails to teach such a layer comprised of tungsten as claimed. Although the Examiner alleges that paragraph 28 of Yao discloses the barrier/seed layer 105 as being tungsten, paragraph 28 does not describe the relevant structure of Figs. 1A-1B, upon which the remainder of the rejection is based. Instead, paragraph 28 describes elements of Figs. 2A-2D, which illustrate a different process flow than that of Figs. 1A and 1B. There is no link between the barrier/seed layer 105 of Yao of Figs. 1A and 1B and the barrier layer disclosed with respect to Figs. 2A and 2B, and described in paragraph 28 of Yao.

Second, even if one assumes the discussion of paragraphs 28 and 29 apply to Figs. 1A-1B, which they do not, Yao *still* fails to disclose all of the elements of claim 1 as amended. In particular, Yao fails to disclose the step of producing a second conductive seed layer having a multiple-layer structure. While paragraph 29 mentions the seed layer, it does not disclose

the seed layer further comprising of additional layers.

Thus, Yao fails to teach, show, or suggest all of the elements of claim 1. Accordingly, it is respectfully submitted that claim 1 is patentable over the prior art.

B. Claims 2-7, 9-11, 13-15, and 17

Claims 2-7, 9-11, 13-15, and 17 were rejected as allegedly being anticipated by or obvious over Yao. Claims 2-7, 9-11, 13-15, and 17 depend from and incorporate all of the limitations of claim 1. Accordingly, for at least the same reasons as those set forth above in connection with claim 1, it is respectfully submitted that the rejection of claims 2-7, 9-11, 13-15, and 17 should be withdrawn.

C. Claims 16 and 18-25

Claims 16 and 18-25 all stand as objected to because the claims are dependent upon a rejected base claim, but would be allowable if re-written in independent form including all of the limitations of the base claim and any intervening claims. Claims 16 and 18-25 depend from and incorporate all of the limitations of claim 1. Since claim 1 is believed to be allowable, it is respectfully submitted that the objection to claims 16 and 18-25 should be withdrawn.

III. New Claim 26 Is Allowable Since It Is Based on Allowable Claims

Applicants have introduced a new independent claim 26 based on the original claims 15, 18, and 19. Because claims 18 and 19 were already considered allowable if written as independent claims and because claims 18 and 19 now form the basis of claim 26, claim 26

should also be allowable.

IV. Conclusion

For all of the foregoing reasons, it is respectfully submitted the applicants have made a patentable contribution to the art. Favorable reconsideration and allowance of this application is, therefore, respectfully requested.

Respectfully submitted,



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